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ABSTRACT

Noting that the informal communication network or grapevine plays an important role in organizational functioning, this paper reviews research focusing on organizational grapevines from the communication, organizational psychology, and management literature. Among the issues discussed in the review are (1) the speed and accuracy of the grapevine, (2) media, (3) direction of grapevine flow, (4) initiators and recipients of grapevine information (organizational position and level, sex, functional grouping, and tenure), and (5) perceived value or influence of the information. The paper presents a number of generalizations based on the review, compares the research methodology used in the studies, and evaluates ecco analysis as an effective tool for measuring grapevine communication. (FL)

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ORGANIZATIONAL GRAPEVINES: A STATE-OF-THE-ART REVIEW

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ABSTRACT

This paper provides a review of research dealing with organizational grapevines from the communication, organizational psychology, and management literature. Among the issues discussed in this analysis are the speed and accuracy of the grapevine, media, direction of grapevine flow, initiators and recipients of grapevine information (organizational position and level, sex, functional grouping, tenure), and perceived value/influence. In addition to describing each of these studies, the paper assesses them comparatively and offers recommendations for future research in this area.

ORGANIZATIONAL GRAPEVINES: A STATE-OF-THE-ART REVIEW

Introduction

An organization possesses both formal and informal communication networks. The formal one, reflected by the organizational chart, is systematically established for the transmission of officially sanctioned messages. In contrast, the informal one emerges spontaneously and is situationally derived. The informal system, or grapevine, supplements the formal network. It serves to translate the messages formally transmitted by management for the employees who use them. The informal system provides a mechanism for employees to socialize with one another and to express themselves about organizational happenings "off the record." It provides a means for management to tap employee sentiment and to acquire input for decision making. It can even be an effective device for disseminating certain information. The grapevine does not always include the same individuals, nor is it consistently initiated by the same individuals.

In addition to its positive affects on an organization, the grapevine can have negative ones also. Information can be leaked prior to its formal announcement through proper channels. Sometimes, information leaked this way is inaccurate or becomes distorted through its transmission, causing morale problems and possibly organizational dysfunctioning.

The formal network is frequently out-of-date in its informational content, deals primarily with routine matters, and sometimes does not make distinctions among specific events. Since the informal network is spontaneous in nature, it becomes a vehicle for employees to get needed information, particularly in a

crisis, or when information is being withheld. This makes the formal network more or less structured and predictable and the informal network just the opposite. Adaptation and control of the grapevine by management then becomes paramount.

Because the informal network or grapevine plays such a key role in organizational functioning, it seems appropriate to assess the research which has been conducted in this area. The purpose of this paper is to review studies focusing on organizational grapevines from the communication, organizational psychology, and management literature.

Review of the Literature

Caplow (1947) studied rumor transmission within military units over a two-year period through use of observational/interview methods. Five key individuals provided rumor data to the researcher on a regular basis; twenty additional personnel members scattered throughout the organization fed information through also for recording. At the end of each month, the data were tabulated and classified as to subject matter and diffusion.

Among his findings were the following: (1) rumors traveled along intra-functional rather than inter-functional lines; (2) comparatively few rumors were found in the system; (3) rumor information was more accurate than inaccurate; (4) the diffusion rate was rapid; (5) the majority of rumors were comprised of three associated statements; (6) distortion appeared mainly through attempts to simplify statements, rather than addition or subtraction; (7) a relationship existed between rumor survival, in terms of both time and diffusion, and its veracity; and (8) rumors tended to flow along certain channels of person-to-person interaction.

Davis (1953a) performed "ecco (episodic communication channels in organization) analysis" on personnel in the Jason Company, a manufacturer of leather

goods. Specifically, he studied 67 managerial employees through administration of questionnaires in regard to 14 communication episodes. The personnel studied consisted of top executives to foremen in a company which employed a total of 600 individuals.

The grapevine at the Jason Company was found to be highly selective and one which operated mostly at the work site. The informal communication system was shown to work in conjunction with the formal system, such that if one were active, both were active, and vice versa. The cluster chain was found to be the primary transmission pattern for grapevine communication, suggesting that only a few employees who were cognizant of a piece of such information ever choose to transmit it. Davis discovered that while these "liaisons" were not consistently the same individuals as different grapevine messages occurred, "isolates" were consistent in staying out of the transmission process almost always. Liaisons apparently participated in continuing grapevine transmissions when the information involved was particularly interesting or about someone with whom they were associated with socially and if the information were recent in nature.

The predominant communication flow in the Jason Company was found to be downward or horizontal; a direct relationship was indicated between the position of the employee in the organizational hierarchy and his knowledge of company events. While informal communication may have reached the top of the organization through a single line of communication, it was transmitted downward and outward through the cluster chain. Davis discovered that staff executives knew more company information than line executives at the firm. The predominant flow of information was found to be across functional lines, rather than within them; communication occurred more between the production, sales, finance, and office divisions than within them. Group isolation from the communication flow tended to occur with some functional groups, causing an uneven spread of information

in the firm, because of geographical or social separation from others. This problem was more prevalent with the lower work groups.

Walton (1959) examined various communication channels at a Naval Ordnance Test Station. He administered a survey to 100 randomly selected employees, asking them questions about their reliance upon and the perceived effectiveness of these communication channels. He found that reliance upon the grapevine as a source of information varied as a function of employee seniority. Reliance was shown to increase with seniority up to five to seven years and then level off and drop sharply with employees of 12 or more years of service. Overall, the grapevine was described by 38 percent of the respondents as the fastest means of communication available. Print media were described as the slowest form. Those forms with the few organizational restraints imposed upon them were seen as the fastest; thus, the grapevine with virtually no restrictions was ranked highly as a speedy disseminiation method.

In further research at the Naval Ordnance Test Station, Walton (1961) examined the amount of policy information derived by employees from the grapevine. Of the 100 employees surveyed, 27 percent indicated that less than half of this information emanated from the grapevine, 45 percent noted that it was about half, while the remaining 28 percent saw it as more than half. In terms of perceived accuracy of the grapevine, 22 percent of the employees indicated that it was accurate less than half of the time, 50 percent thought this was the case about half of the time, while the remaining 28 percent placed this accuracy at over half of the time.

When asked questions about actual grapevine behavior, the employees provided slightly different responses. In this case, the most frequently mentioned source of information was the channel utilized by management in originally disseminating the information. Apparently, employees do not receive as much

information from the grapevine as they think they do. Accuracy of information was found more frequently among employees exposed to the original source, rather than among those who had received the information second or third hand. Through administration of these questions, it was revealed that the effectiveness of the organizational grapevine varied as a function of the type of information it carried. Further, it was found that the grapevine diminishes as a source of information as time goes by, it mainly acts as a source of current news.

Hershey (1966) obtained reports about rumor behavior from 13 employees of various organizations. During a two-month period, the respondents reported 30 rumors in their companies; only three of the rumors (10 percent) were recorded more than once. Sixteen of the rumors (53 percent) proved to be groundless, nine (30 percent) were shown to be totally accurate, five (17 percent) to be partially accurate. The average time for testing these rumors turned out to be 44 days. The persistence of a rumor in the system was shown to have no bearing upon its accuracy.

Hershey identified three types of organization rumors: (1) anxiety rumors, ones that reflect uneasiness among employees (e.g., "A cost-of-living raise will not happen this year"); (2) wish-fulfillment rumors, ones that reflect employee desires (e.g., "I hear collective bargaining will get us higher salaries"); and (3) wedge-driving rumors, ones that reflect disunity in or between employee groups or departments (e.g., "Those executives get better benefit plans than we do.")

Millard (1968) examined the formal and informal interactions in a small manufacturing firm. The entire managerial population of the company (32) from president down to departmental managers participated in the study by recording communications over a five-day period. The resulting 11,000 communications were analyzed.

Non-vertical communication was predominant in the organization. Sixty percent of all total contact in the firm was found to be formal communication. Looking at the organization on an inter-departmental basis, however, there were some areas where the majority of communications were informal, often horizontal.

Sutton and Porter (1968), in a replication of the Davis (1953a) study, performed ecco analysis in a regional tax office of a state government with all 79 employees. Over a period of seven months, nine communication episodes were incorporated in the analysis. In contrast to the Davis study, in which only managerial personnel were utilized, here both managerial and rank-and-file employees were surveyed.

Among the rank-and-file employees, 33 percent were identified in terms of corporate grapevine communication as isolates (did not hear the information more than 50 percent of the time), 57 percent as dead-enders (passed information on less than one-third of the time), and 10 percent as liaisons (passed information on more than one-third of the time).

A direct relationship was found in the firm between hierarchical position and knowledge concerning grapevine information, confirming findings in the Davis study. In contrast to the earlier study, the predominant flow of information in the tax office occurred within, rather than between, functional groupings. The exchange of information within the four functional groupings in the tax office accounted for 64 percent of the total, while the exchange between these groupings accounted for 36 percent of the total.

As grapevine information became more relevant to the task at hand, its transmission became more frequent but not significantly so. For 71 percent of the employees identified as liaisons, the degree of task relevance associated with grapevine information was not an important factor in passing it on; these employees transmitted the information in any case.

Finally, Sutton and Porter made an attempt to correlate personality variables with grapevine behavior. Though not significantly different, the liaisons were found to be more interaction-oriented, the dead-enders to be more task-oriented, and the isolates to be more self-oriented.

Sutton (1969) surveyed the grapevine behavior of 169 managerial personnel in a county department service organization of a state government through ecco analysis. Fifteen communication episodes were examined over a three and one-half-month period. This research represented an extension of the Sutton and Porter (1968) study.

Liaison individuals increased in number in conjunction with moving up the organizational hierarchy. These employees tended not to pass information on to more than one individual. The composition of the liaison group varied little as a function of informational content on the grapevine. Information flow predominated within functional groupings, rather than between them, confirming findings in the Sutton and Porter study.

In some contrast to the Sutton and Porter study, information of moderate task relevance was transmitted more often than either major or minor relevant items. No strong or consistent relationships were noted in the Sutton study between personality variables, as measured by Gough's Adjective Check List, and grapevine network behavior.

Davis (1969) conducted a survey of 50 lower and middle managers of various companies (mainly electric utility firms) to ascertain their primary source of grapevine information. For these 50 managers, 20 of the sources (40 percent) came from within the chain of command, 26 (52 percent) were outside of the chain of command, and four (two percent) emanated from outside the company. Of the 26 reported from within the chain of command, 12 (46 percent) were peers. The majority, however, emerged vertically, either from above or below the employees

involved; sources were reported from as many as three levels below and two levels above the manager in question, mainly from below. The fact that so many managers in this research sought grapevine information from outside their chain of command supports findings of such communication between functional groupings in the earlier Davis (1953a) study.

For those managers who had as their primary grapevine source their own chain of command, all but one source was positioned at a lower level in the organizational hierarchy. These sources were primarily located at the first and second lower levels, although eight of the 20 (40 percent) were from two or more levels below and one manager even sought such information from a receptionist four levels below.

Nine of the 50 managers (18 percent) surveyed in the study reported that the primary source of grapevine information was a secretary. Six of these secretaries were located in the chain of command, three were not.

Marting (1969) performed an ecco analysis in an electronic manufacturing organization. The sample (109 employees) consisted of a vertical segment of the work force. One communication episode was analyzed 16 hours to six months after it originated. The results demonstrated that: (1) grapevine communication operates at least an 80 percent accuracy rate; (2) at least 10 percent of corporate employees function as liaisons in a grapevine network; (3) managers communicate across functional groupings more than non-managers; (4) grapevine behavior in general does not vary between line and staff members, managers and non-managers, and higher-level and lower-level managers; and (5) informal social associations are more a determinant of grapevine behavior than formal lines of power and authority.

Lee (1971) studied the communication networks in 71 branches of a geographically decentralized bank through ecco analysis. Seven communication episodes

were examined through administration of questionnaires to 186 managerial personnel over approximately five weeks.

Grapevine communication was shown to flow downward in the Lee study. Very few managers communicated grapevine information initially to more than one other employee. Oral communication operated as the primary means for grapevine communication among the managers. The management grapevine was a less effective channel in getting the word out for the seven communication channels than the formal network. Personal grapevine information was shown to have a higher per capita reception rate than its counterpart; the opposite was the case for the per capita initiation rate.

Timpano (1972) performed an ecco analysis in an elementary school and a secondary school in order to examine their communication networks. Eight communication episodes were traced over a five-week period. Questionnaires were completed by 256 employees. Network characteristics varied in each school as a function of the information transmitted in the system and organization differences between the schools themselves.

Rudolph (1973) used ecco analysis to examine grapevine communication in a multi-shift public utility company. Eight different organizational levels were represented among the 124 employees to whom surveys were administered. Over a three-week period, 12 communication episodes were utilized to track grapevine flow within the firm.

Results of the study suggest that: (1) a curvilinear relationship exists between organizational level and grapevine information received, such that those in the middle of the hierarchy (in this case, level 4) are the most cognizant of this information; (2) a greater amount of informal communication flows between functional groups than within them; (3) greater informal flow occurs downward and horizontally than upward; (4) informal communication is accurate more than

80 percent of the time; (5) the amount of informal communication varies from group to group.

Newstrom, Monczka, and Reif (1974) tested perceptions of the grapevine, specifically its value and influence, among 341 managers and white-collar employees, representing all functional areas and organizational levels of 164 organizations.

Individuals employed for 6-10 years perceived the grapevine as less valuable than those employed for 11-15, 16-20, or 26-30 years. This suggests a curvilinear relationship where new employees utilize the grapevine as part of the socialization process, then find it less useful as they accrue tenure with the organization, and finally see it as more valuable in subsequent years.

Among those surveyed, individuals employed in Finance/Accounting or Personnel/Labor Relations areas perceived the grapevine of greater value than did those employed in the Marketing area. This might be explained by the internal versus external orientations of these functional areas.

Middle managers perceived the grapevine as more influential than did first-level supervisors. Employees working with a large number of other people perceived the grapevine as more influential than did those working in smaller operations. However, employees in smaller units viewed the grapevine as more valuable than did those in larger units.

Knippen (1974) examined informal communication in a retail chain store through administration of ecco analysis to 170 employees over 15 communication episodes over four months. In confirmation of findings in research by Davis (1953a) and Sutton and Porter (1968), a direct relationship was found between hierarchical position and knowledge of grapevine information; managers were shown to be twice as knowlegeable in regard to this information as non-managers.

Knippen found that managers primarily received grapevine information from across functional grouping lines, but generally initiated it within their own departments. While managers tended to initiate new grapevine information, they tend not to perpetuate redundant information; the opposite was found to be the case for non-managers. Informal information tended to be initiated and received by non-managers with their own department. One-quarter of all grapevine initiated information was found to emerge from persons outside the company, equally from employees at other locations and from individuals not associated in any way with the firm. Finally, oral communication was shown to be the primary means for grapevine transmission, with the flow being essentially downward.

Full-time employees were shown to be more knowledgeable of grapevine-related events than part-time employees, more active in passing such information on to a greater number of recipients, and received their information from fewer intrafunctional sources. No differences in male and female behavior were found

Thompson (1975) conducted an evaluation of a company magazine and an organizational grapevine in terms of their effectiveness as communication channels. The magazine was shown to be an effective formal channel for the company, but as one which could not serve all the purposes of formal communication. The magazine was found to be a more effective means of communication than the grapevine.

Kaufman (1977) performed an ecco analysis in three sales-oriented companies in order to examine grapevine communication behavior. The sample for the study consisted of 142 employees. Four sets of questionnaires were administered relating to personal, organizational, middle management oriented, and top management oriented information.

No difference was found between lower and middle management grapevine patterns. Grapevine communication behavior was shown to be equal between males and females. Secretaries were found to play a significant role in grapevine transmission. Grapevine communication was shown to take place between and within functional groupings and primarily at the work site. Top management was found to be a key initiator of grapevine information to other levels. Finally, grapevine communication was shown to be primarily downward or horizontal in nature.

Davis and O'Connor (1977) planted a piece of information in a university department to assess grapevine behvior through ecco analysis. Surveys were given three days later to faculty, secretaries, graduate assistants, and selected outsiders to determine their role in the transmission and reception of this information.

A cluster pattern of grapevine communication was revealed in this study. Few employees communicated the information to more than one other person. Individuals were found to communicate primarily with others in their own functional group. Information was altered in the process of its transmission through leveling, sharpening, and assimilation.

Licata and Hack (1980) conducted a study to determine the grapevine network among school principals. Interviews with 28 principals were done within a single school district. "Clan-like" informal grouping patterns, reflecting familial type relationships, were identified among elementary principals. In contrast, "guild-like" informal grouping patterns, reflecting common professional interests, were identified for high school principals, middle school principals, and special school principals. The former group tends to associate on the basis of common ancestors or mentors, former working relationships with one the supervisor of the other, or close social relationships as friends,

neighbors, or relatives. The latter group tends to associate on the basis of common situations or problems among its members.

Discussion

The purpose of this study has been to analyze the research conducted to date focusing on organizational grapevines. As part of this analysis, an assessment of the research as a whole needs to be made, in addition to the independent description of studies thus far, as well as a comparative evaluation.

Knowledge to Date

On the basis of the research performed to date on informal communication networks and organization grapevines in particular, the following generalizations can be made:

(1) The grapevine emerges out of the social and personal interests of employees, rather than formal requirements of the organization. (Davis, 1954)

(2) While the grapevine is typically associated with workers in a company, it is just as active among members of management. (Davis, 1954)

(3) Five out of every six messages in the organization are transmitted through grapevine channels, rather than formal ones. (Lewis, 1980)

(4) The grapevine is people oriented, rather than issue oriented. (Goldhaber, Dennis, Richetto, and Wiio, 1979)

(5) While the formal organization provides a "blueprint" as to ways employees are supposed to behave, the informal one describes ways in which they actually do. (Jacoby, 1968)

(6) The grapevine flows in all directions in an organization—horizontally and vertically (upward and downward). (Lewis, 1980)

(7) Though the grapevine can operate through single stand gossip or probability transmission patterns, it generally operates through a cluster transmission pattern. (Davis, 1953a)

(8) The grapevine operates largely through oral communication. (Knippen, 1974)

(9) The grapevine carries more accurate than inaccurate information. (Caplow, 1947; Marting, 1971; Rudolph, 1973)

(10) The grapevine can start and stop anywhere in a company. (Goldhaber, Dennis, Richetto, and Wiio, 1979)

(11) Three types of rumors can travel along the grapevine: anxiety rumors, wish-fulfillment rumors, and wedge-driving rumors. (Hershey, 1966)

(12) Only a small portion of the informal network consists of rumors. (Caplow, 1947; Davis, 1953a; Rogers and Agarwala-Rogers, 1976)

(13) The grapevine often carries information which would be inappropriate on formal channels (e.g., social information). (Koontz and O'Donnell, 1955)

(14) The grapevine has a tendency to carry an incomplete story. (Lewis, 1980)

(15) Grapevine behavior does not differ as a function of employee sex. (Marting, 1969; Kaufman, 1977)

(16) Rumors become distorted through sharpening, leveling, and assimilation. (Allport and Postman, 1947; Davis and O'Connor, 1977)

(17) Secretaries play a key role in organizational grapevine transmission. (Davis, 1969; Kaufman, 1977)

(18) Rumors are more prevalent in organizations that foster secrecy. (Yoder, 1970)

(19) Rumors spread as a function of the importance and ambiguity of the information involved. (Allport and Postman, 1947)

(20) As the number of individuals in an organizational relationship increases, so does grapevine activity. (Goldhaber, Dennis, Richetto, and Wiio, 1979)

(21) Rumors move more quickly among employees who are close in time and space. (Boss, 1965)

(22) The grapevine operates mainly at the work site. (Davis, 1953a; Kaufman, 1977)

(23) Liaisons play a key role in grapevine transmission. (Davis, 1953a)

(24) The grapevine is fast in transmitting information. (Davis, 1953a)

(25) The grapevine diminishes as a source of particular information with time. (Walton, 1961; Davis, 1961)

(26) The grapevine is highly selective and discriminating in the information it carries. (Davis, 1953a)

(27) Formal and informal networks tend to be jointly active or inactive. (Davis, 1953a)

(28) Of those who receive grapevine information, relatively few transmit it to others. (Davis, 1953a)

(29) Only a small percentage of employees act as liaisons in grapevine transmission. (Davis, 1953a; Sutton and Porter, 1968)

(30) Rumors may be easily carried over the grapevine, since it offers no reliable source from which individuals can confirm facts. (Davis, 1954)

(31) Individuals participating in grapevine activity are not held accountable for distortion of information in the same way that they would over formal channels, allowing them to treat grapevine information more freely. (Davis, 1954)

(32) The grapevine is predictable to the extent that its activity is associated with news events, it may carry information that concerns certain individuals, and it ties to people relationships in the organization. (Davis, 1954)

(33) Once a rumor is assigned credibility, other events in the organization are aligned to fit in with it and support it. (Davis, 1961)

Comparative Analysis

Of the 19 studies reviewed in this paper, 10 employed ecco analysis techniques. To do this, these studies implemented from one to 15 communication episodes (average = nine). The number of subjects in these ecco analysis studies ranged from 67 to 256. In three of these studies, these individuals represented management only (Davis, 1953a; Sutton, 1969; Lee, 1971); in the other seven studies all types of personnel were employed (Sutton and Porter, 1968; Marting, 1969; Timpano, 1972; Rudolph, 1973; Knippen, 1974; Kaufman, 1977; Davis and O'Connor, 1977).

The types of organizations examined in the 19 pieces of research reviewed varied considerably: (1) three studies, manufacturing organizations (Davis, 1953a; Millard, 1968; Marting, 1969); (2) three studies, a military installation

(Caplow, 1947; Walton, 1959; Walton, 1961); (3) two studies, a government agency (Sutton and Porter, 1968; Sutton, 1969); (4) three studies, an educational environment (Timpano, 1972; Davis and O'Connor, 1977; Licata and Hack, 1980); (5) one study, a bank (Lee, 1971); (6) one study, a public utility company (Rudolph, 1973); (7) one study, sales-oriented organizations (Kaufman, 1977); (8) one study, a retail chain store (Knippen, 1974). In addition, three other studies examined grapevine behavior in various companies (Hershey, 1966; Davis, 1969; Newstrom, Monczka, and Reif, 1974). In six of the studies, more than one organization (or branch of an organization) was analyzed (Hershey, 1966; Davis, 1969; Lee, 1971; Timpano, 1972; Newstrom, Monczka, and Reif, 1974; Kaufman, 1977).

Several discrepancies are evident in the literature reviewed in this paper in determining the nature of grapevine behavior. Six such discrepancies will be discussed here.

The first discrepancy concerns the hierarchical position of an employee and his knowledge of grapevine information. Support is shown for a direct relationship by Davis (1953a), Sutton and Porter (1968), and Knippen (1974). A curvilinear relationship was found by Rudolph (1973), supporting the other three studies from the low to middle employee levels in the organization, but finding opposing evidence from the middle to high employee levels. Marting (1969), on the other hand, found no difference in the information level among various organizational hierarchical positions.

The second discrepancy involves the isolation of individuals from grapevine information flow. Davis (1953a) identified some functional groups in the company he studied which were consistently out of the communication flow. Sutton and Porter (1968) found that within non-management groups, 33 percent of the individuals did not receive grapevine information any more than 50 percent

of the time. These employees were designated by the researchers as "isolates." Marting (1971) found that the non-managers in the company she studied were no more isolated from the information flow than were the managers. Rudolph (1973), on the other hand, found that non-management groups differed in the amount of informal information they received. Walton (1963) found that power figures, or those positioned highly in the organizational structure, were isolated from informal communication flow.

The third discrepancy concerns the direction of grapevine information flow. Lee (1971) and Knippen (1974) found that the flow was primarily downward. Davis (1953a), Davis (1969), Rudolph (1973), and Kaufman (1977) found that such information flow occurred primarily horizontally and downward.

The fourth discrepancy involves the issue of intra-functional versus inter-functional grapevine behavior. Caplow (1947), Sutton and Porter (1968), Sutton (1969), and Davis and O'Connor (1977) found grapevine behavior to be more prominent on an intra-functional basis. Davis (1953a), Davis (1969), and Rudolph (1973) found the opposite to be the case. Kaufman (1977) found both within and between grouping grapevine information flow prominent in the organizations she studied, while Marting (1971) found intra-functional flow was a more frequent form for non-managers and inter-functional flow was the more frequent choice among managers. Knippen (1974) isolated a finer distinction in this regard. Managers in his study received such information on an inter-functional basis, but sent it on an intra-functional one. On the other hand, he found that non-managers sent and received this information on an intra-functional basis.

Intuitively, one would expect inter-functional channels to be a frequent mode of grapevine communication among managerial personnel because of committee assignments and procedural demands placed upon them to work together. Within

group grapevine communication might be a less frequent activity because of imposed status barriers. Non-managers could form social relationships within their own units and might not be as mobile as communicating with other functional groups.

The fifth discrepancy concerns individual employee consitency in acting as liaisons in the grapevine network. Davis (1953a) found that these individuals changed as a function of varying information on the grapevine. Caplow (1947), Sutton and Porter (1968), and Kaufman (1977) demonstrated the consistency of these individuals over varying informational content on the grapevine network.

The sixth discrepancy involves employee seniority and grapevine behavior. Walton (1959) found that reliance upon the organizational grapevine increased with employee seniority up to five to seven years, then leveled off, and dropped sharply with those of 12 or more years of service. Newstrom, Monczka, and Reif (1974) found that individuals employed for 6-10 years perceived the grapevine as less valuable than those with 11-15, 16-20, or 26-30 years of service. In both studies, all levels of employees were surveyed.

Ecco Analysis as a Grapevine Measurement Tool

Ecco analysis, developed by Davis (1952), has been a primary vehicle in performing grapevine research. It, therefore, is appropriate to examine the strengths and limitations of this approach as part of this analysis.

This approach allows for the gathering of information through the tracing of particular communication episodes introduced into the system. The questionnaire distributed to respondents sometime after message initiation can ascertain who is cognizant of the message, from whom each individual obtains the information and to whom he transmits it further, the time elements involved, the location of reception and transmittal, the media utilized in its flow, accuracy and distortion factors, and so forth. From this, the researcher can compare the

formal and informal networks in an organization. Organizational levels, functional groups, and other employee-related variables can be correlated with these findings.

One of the strengths of the ecco analysis approach lies in the simplicity of its administration through its relatively low cost, rapid response time, and adaptability to various contexts. Identification codes can be utilized to encourage employee participation; minimum interference with corporate operations is possible through its quick administration. Since it asks essentially specific factual information rather than opinions (e.g., times, locations, sources), employees are more likely to participate. With its ease of administration, entire populations can be surveyed. The same basic ecco analysis can be used to study various communication episodes. This facilitates employee understanding of the instrument, as well as their acceptability of it.

While ecco analysis is a highly effective technique for gathering data about grapevine behavior in organizations, some limitations do exist. First, the technique is suitable for obtaining information relating to episodic communication but not typical overall communication patterns. The particular selection of messages for ecco analysis, therefore, becomes critical in making generalizations about the organization. The approach relies upon the recall ability of the respondents, which can sometimes be a problem. Of the ecco analysis studies reported in this analysis, none had more than 256 respondents; ecco analysis is an unwieldy technique for large organizations, unless only certain segments are examined.

Future Research

On the basis of the foregoing literature review and analysis, several specific recommendations can be made in regard to grapevine research, in addition to further resolution of the six discrepancies described.

Sutton and Porter (1968) and Sutton (1969) made some analysis in their studies of the effects of employee personality variables on grapevine behavior but with little conclusive evidence. Further research needs to specifically test such variables in various grapevine contexts.

While the specific types of grapevine distortion have been identified (sharpening, leveling, and assimilation) and documented in organizations (see, for example, Caplow, 1947; Davis and O'Connor, 1977), little evidence is available which describes this behavior beyond general terms. Future research might examine this behavior on a more specific level, in terms of content, types of employees, and varying conditions.

Jacobsen and Seashore (1951) initially described liaisons as those who actively participate in grapevine activity. Davis (1953a), who used the term interchangeably with "key communicators," described these individuals as those who communicate grapevine information to at least one other individual. Sutton and Porter (1968) further refined the distinction among communicator types associated with grapevine behavior. These researchers described liaisons as those who passed on the information more than one third of the time, isolates as those who did not hear the information more than 50 percent of the time, and deadenders as those who passed the information on no more than 30 percent of the time. Research needs to verify the appropriateness of the designations so that studies can be more comparable.

Some of the studies described in this analysis have reported specific findings singular to them. These findings need verification in future research across various contexts. Examples include: (1) the relationship between task relevance of information and grapevine behavior (Sutton and Porter, 1968; Sutton, 1969); (2) the differences in grapevine behavior between line and staff members (Davis, 1953a; Marting, 1971); (3) the perpetuation of redundant grapevine information (Knippen, 1974); (4) the reception rate for personal grapevine information versus non-personal grapevine information (Lee, 1971); and (5) the nature of grapevine behavior for single-shift versus multi-shift operations (Rudolph, 1973).

Three of the studies reported in this paper (Davis, 1969; Knippen, 1974; Davis and O'Connor, 1977) point to the flow of grapevine information from outside an organization. This represents an area for future research as to the conditions under which this information is transmitted, the nature of its accuracy and distortion, its timeliness, and the nature of its senders and receivers (in particular, whether or not the organizational representatives are cosmopolites who function in a form similar to introducing innovation into the system).

Newstrom, Monczka, and Reif (1974) determined that perceptions of the value of an organizational grapevine varied by functional area. Specifically, those in more internally-related areas (finance/accounting or personnel/labor relations) viewed it more valuable than those in a more externally-related area (marketing). These findings need to be tested in terms of actual grapevine behavior of such units and extended to other areas.

Few studies of those reported here (e.g., Timpano, 1972) employed any type of cross-organizational approach. When more than one company was utilized in these studies, the analysis tended to be of a cumulative nature, since they generally involved surveys of individuals in many companies, rather than in-depth studies of a few for comparison.

Grapevine research has primarily been conducted on the basis of ecco analysis. To date, no single instrument has been developed to study grapevine behavior on a more global level beyond specific communication episodes which rely upon respondent recall.

Little mention has been made thus far about control of the organizational grapevine as a negative effector of organizational functioning. Possible techniques involve preventive action through: (1) providing needed information to employees in a timely, hones, and open manner; (2) being sensitive to employee anxieties and attitudes; (3) using redundancy in communicating needed information; (4) locating key communicators and engaging them in making sure targeted information gets through the system; and (5) curbing idleness and monotony among employees (Davis, 1961; Hershey, 1966; Mandel and Hellweg, 1979).

One control mechanism which has received only a small amount of attention in the grapevine literature is the concept of a rumor control center. Weinberg and Eich (1978) established such a center at a university which attempted to squelch inaccurate rumors and spread verified information in their place. The researchers tested the effectiveness of the center in a graduate employee strike on the campus; it was found to be relatively successful as an intervention agent. Goldhaber (1979) discusses the concept of telephone rumor control systems and reports that some organizations have adopted such systems. Future research needs to develop and test this concept more fully.

Despite some inconsistencies in the research reported, grapevine studies to date have contributed greatly to the understanding of organizational functioning in this area. Relevant variables have been tested and their associations with grapevine behavior relatively well established. Generalizability of the evidence produced to a variety of contexts has in some cases been documented. What hopefully can follow is a continuation of these efforts, increasing the knowledge base in this important aspect of organizational behavior.

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